

Notice of Allowability

Application No.

09/760,682

Applicant(s)

CHOUDHURY ET AL.

Examiner

George Y. Wang

Art Unit

2871

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to RCE filed January 18, 2005.
2. ☒ The allowed claim(s) is/are 1-16, 18-29, 31-39 and 41.
3. ☒ The drawings filed on 23 December 2002 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on January 18, 2005 has been entered.

Allowable Subject Matter

2. Claims 1-16, 18-29, 31-39, and 41 are allowed.

The following is an examiner's statement of reasons for allowance: As the claims were read and interpreted in light of the specification, the prior art of record fails to specifically disclose, in particular, "at least two pin passages...being sized, shaped and positioned to receive respective projecting pins, the pin passages and projecting pins being precisely sized to eliminate movement between the pin passages and projecting pins when the projecting pins are inserted into the pin passages" as recited in independent claim 1. Applicant's amendment overcomes the rejection of claims 1-11, 13-16, 18-25, 27-29, 31-39 and 41 under 35 U.S.C. 103(a) with Bunin et al. (U.S. Patent No. 5,907,651, hereafter "Bunin") in view of Yanagawa et al. (U.S. Patent No. 5,297,228, hereafter "Yanagawa") by showing that the invention completely does away

Art Unit: 2871

with bushings and adhesives to eliminate movement "to ensure that the pins sit securely within the passageways" (Remarks, p. 10)

As to independent claim 21, the prior art of record fails to specifically disclose, in particular, "predetermined alignment patterns etched into the substrate body as accurately as the crystal structure of the substrate material." With regards to independent claim 33, the prior art of record fails to specifically disclose, in particular, the method of "forming a wafer having a plurality of aligned respective channels chemically etched therein as accurately as the crystal structure of the substrate material." In each of these instances, Applicant's amendments overcome the rejection of claims 12 and 26 under 35 U.S.C. 103(a) with Bunin in view of Yanagawa and further in view of Applicant's Admission of Prior Art (AAPA) by showing that the precision of the chemical etching "to form channels in the substrate, which is as precise as the crystalline structure of the substrate itself" (Remarks, p. 10).

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

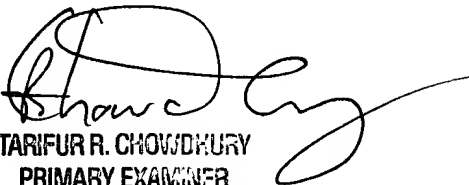
3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to George Y. Wang whose telephone number is 571-272-2304. The examiner can normally be reached on M-F, 8 am - 4:30 pm.

Art Unit: 2871

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert H. Kim can be reached on 571-272-2293. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

gw
April 12, 2005


TARIFUR R. CHOWDHURY
PRIMARY EXAMINER